

REMARKS

Upon entry of the amendments, claims 9-18 and 21-26 will be pending in the application. Applicants request reconsideration of the Office Action based upon the following comments.

Claim Rejections – 35 U.S.C. § 102

Claims 9-13, 15, 16, 18, 21-25 are rejected as anticipated by Thompson (US 5,022,419).

Regarding independent claim 10, Applicants respectfully submit that Thompson fails to inherently or explicitly disclose that:

“the ejecting orifices are formed so as to eject the processing liquid towards substantial centers of the substrates held by the substrate holder and obliquely to the processing surfaces of the plural substrates in such a way that the plane of ejecting processing liquid and the surface of the substrates forms a little angle, the ejecting orifices being formed so as to eject the processing liquid against the processing surfaces of the substrates held by the substrate holder so that a width of the plane-ejected processing liquid are generally equal to the diameters of the substrates.”

The above referenced features impart a certain structure to the claimed ejecting orifices, which differ from the ejecting orifices shown in the cited Thompson patent. The above referenced features do not merely recite how the ejecting orifices operate, rather the claim language provides structure because the fluid will be ejected in a certain

manner based on the physical structure of the ejecting orifice (such as the recited angle and the width of the liquid spray).

Applicants note the Examiner's comment regarding the ratio of spray width to substrate diameter, but respectfully disagree. If the nozzles of Thompson were formed as set forth in claim 10, the prior art apparatus would be deficient. Thompson, as shown in the drawings, has less nozzles than potential substrates and would not be able to eject fluid as set forth in claim 10 because of the structural differences.

Regarding claim 11, Applicants respectfully assert that the cited prior art does not show that a pedestal of a nozzle body that supports a nozzle member is inclined upon reviewing the Examiner's reference to Figure 4 of Thompson.

Regarding claim 18, Applicants respectfully avow that Thompson fails to inherently or explicitly disclose:

“a processing container having an inner surface facing the circular plates; and
an ejecting orifice formed on the inner surface of the processing container.”

This configuration allows cleaning and drying of the circular plates to keep the inner space of the processing container clean. The arrangement shown in Thompson shows nozzles that are located above and extend parallel to the substrate holder, rather than on the inner surface of the processing container that faces the circular plates. For comparison purposes and as an example of an embodiment, reference is made to Fig. 5 and nozzle parts 74a and 74b. The nozzle of Thompson appears to be more similar to nozzle parts 54 and 56 of that embodiment.

Regarding claim 21, Thompson fails to disclose “wherein the ejecting orifices are located relative to the position of the substrates held by the substrate holder so that in plan view the ejecting orifices do not overlap with the substrates, whereby processing liquid adhered to the ejecting orifices do not drip down onto the substrates.” Applicants note the comments in the Office Action, which suggest that this feature would be mere use. Applicants assert, however, that the claimed arrangement implies the structural relationship between the substrate holder and the ejecting orifices.

Regarding claim 24, Thompson fails to disclose “wherein the ejecting orifices are located so that the processing liquid is ejected against each processing surface of the rotating substrates held by the substrate holder in such a way that a width of the plane-ejected processing liquid is generally equal to a radius of the circular substrate, on the processing surface”. Applicants contend that this feature recites the structural arrangement of the apparatus, i.e. the structural relationship between the substrate holder and the ejecting orifices, and does not recite mere use as alleged in the Office Action.

Due to the foregoing, Applicants respectfully submit that the anticipation rejection of the aforementioned independent claims should be withdrawn. Applicants also aver that the dependant claims are allowable because they depend from allowable subject matter.

Applicants provide the following additional comments regarding some of the rejected dependent claims.

Regarding claim 12, Applicants note that “ejecting orifices being inclined” do not appear to be disclosed in the cited patent.

Regarding claim 13, the cited patent also does not appear to disclose “a plurality of main ejecting orifices arranged so as to correspond to the plural substrates respectively; and extra ejecting orifices arranged further outside of the outermost ones of the main ejecting orifices.”

Claim Rejections – 35 U.S.C. § 103

Claim 14 is rejected as obvious in view of Thompson and Thoms (US 5,378,308).

Applicants have carefully considered this rejection, but respectfully request that it be withdrawn. Claim 14 depends from claim 10, which is not anticipated or obvious in view of Thompson. Consideration of Thoms fails to alleviate the failings of Thompson in regards of claim 14.

Claim 17 is rejected as obvious in view of Thompson. Claim 17 depends from claim 10. As discussed above, Thompson fails to teach all the features of independent claim 10 so dependant claim 17 can not properly be considered obvious. Further, the cited patent fails to disclose “wherein the nozzle has an inside nozzle passage providing the ejecting orifice with the processing liquid, a sectional shape of the inside nozzle passage being rectangular.” Applicants request that this rejection be withdrawn.

New Claim

Applicants have added new claim 26, which is in “means plus function” under 35 U.S.C. § 112, sixth paragraph. This claim incorporates all the structure set forth in the specification and drawings of the application. Applicants respectfully assert that this claim is allowable in view of the cited prior art, which has a different structure.


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Applicants respectfully assert that the application should be allowed. If any additional fees are due in connection with the filing of this response, such as fees under 37 C.F.R. §§ 1.16 or 1.17, please charge the fees to Deposit Account No. 02-4300. Any overpayment can be credited to Deposit Account No. 02-4300.

Respectfully submitted,

Date: August 10, 2004

Signature:


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SGRDC/218969.1